AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1-9. (canceled)

10. (previously presented) Method for coating a non-oxidized stainless steel support plate with an electrically conducting corrosion-resistant coating, comprising applying a diffusion barrier layer containing a titanium compound, followed by applying a nickel layer and introducing said support plate into a carbonate material environment, wherein applying said diffusion barrier layer comprises the application of a titanium oxide containing compound before applying said nickel layer.

11. (previously presented) Method according to Claim 10, wherein at least one of said applied layers has a thickness of at least 25 µm.

12. (previously presented) Method according to claim 10, wherein an adhesion layer is applied to the support plate before titanium oxide is applied.

13. (previously presented) Method according to claim 12, wherein said adhesion layer comprises NiCrAlY.

14. (previously presented) Method according to claim 10, wherein at least one of said layers is applied by high velocity oxygen flame spraying.

15-18. (canceled)

19. (previously presented) A method for manufacturing a non-oxidized stainless steel support plate with an electrically conducting corrosion-resistant coating for a fuel cell, comprising the steps of:

applying a diffusion barrier layer containing a titanium oxide compound to a non-oxidized stainless steel substrate;

then, applying a nickel layer over said diffusion barrier; and

subsequently, placing said support plate in direct contact with a carbonate material environment.

20. (previously presented) The method as claimed in claim 19, further comprising the step of applying an adhesion layer to the non-oxidized stainless steel substrate, before the step of applying the diffusion barrier.

21. (previously presented) The method as claimed in claim 20, wherein said diffusion barrier layer is directly over said adhesion layer.

22. (previously presented) The method as claimed in claim 21, wherein the nickel layer is directly over said diffusion barrier layer.

23. (previously presented) The method as claimed in claim 20, wherein a thickness of at least one of said diffusion barrier layer and said adhesion layer is between 40 and 50 μm.

24. (previously presented) The method as claimed in claim 20, wherein said step of applying the adhesion layer comprises applying an NiCrAlY powder having a particle size of between 10 and 45 μm.

25. (previously presented) The method as claimed in claim 19, wherein the diffusion barrier layer is directly over said substrate.

26. (previously presented) The method as claimed in claim 25, wherein the diffusion barrier layer is applied using a high velocity oxygen flame spraying technique.

27. (previously presented) The method as claimed in claim 25, wherein the diffusion barrier layer has a starting material that is a powder having a particle size of between 5 and 20 μm.

28. (previously presented) The method as claimed in claim 27, wherein the powder is doped with a pentavalent ion.

29. (previously presented) The method as claimed in claim 28, wherein the pentavalent ion is one of niobium and tantalum.

30. (canceled)